

REMARKS

In response to the above Office Action and the rejection of claims 25-40 under 35 U.S.C. §112, second paragraph, claim 25 has been amended to include the required correlation between the concentration of the substance and the refractive index. Support for this can be found, for example, in Figures 8(a), 8(b), 10, and 17-32 and the accompanying descriptions of them.

Claim 25 was also rejected under 35 U.S.C. §102(b) for being anticipated by U.S. Patent No. 5,389,524 to Larsen et al. (hereafter Larsen). The presumed allowance of the subject matter of claims 26-40 since they were not rejected over any prior art is appreciated. However, it is believed claim 25 is not anticipated by Larsen and it also defines a patentable invention over the prior art.

Larsen discloses a method and a system for quantitatively monitoring a chemical component dissolved in a liquid medium, in which the liquid medium and an analytical reagent or reference solution are mixed in a measurement cell, and the absorbance is measured. From the change of the absorbance, a different in the refractive index between the liquid medium and the analytical reagent (reference solution) can be measured.

The Examiner makes reference to Figs. 7a and 7b and Example 4 of Larsen in which with use of the stopped-flow technique, the matrix effect can be eliminated.

However, Larsen does not disclose or suggest use of the thermal lens detection method set forth in claim 25. While in Larsen a sample and reagent are flowed and irradiated with a laser and measurements of absorbance and refractive index are made, the detection means which are described in column 6, lines 31-53 of Larsen do not include the thermal lens detection method according to the present invention.

Moreover, as described in Example 1 of Larsen at column 16, lines 6-37, measuring cells having an internal diameter (i.d.) of 0.5 mm and an optical path length (o.p.l) of 6 mm, or i.d. = 0.7 mm and o.p.l. = 6 mm, or i.d. = 0.8 mm and o.p.l. = 11.4 mm are disclosed. A light emitting diode (LED) is placed on one end of the measuring cell, light is irradiated to the channel and the optical intensity of the transmitted light is measured by a photodiode provided on the opposite end. According to applicants, this is the same as the conventional measurement of absorbance and is not the thermal lens method used in the present invention.

Accordingly, it is not believed that claim 25 is anticipated by Larsen and the withdrawal of Larsen as a ground of rejection under §102 is therefore requested.

It is believed claims 25-40 are in condition for allowance.

It is noted that the Examiner has not returned an acknowledged copy of the Form PTO/SB/08 submitted with the Information Disclosure Statement filed June 28, 2004. It would be appreciated if the Examiner would return the form in the next communication.


Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

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By: _____


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